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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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23909	7590	06/09/2005	EXAMINER	
COLGATE-PALMOLIVE COMPANY			COLE, LAURA C	
909 RIVER ROAD			ART UNIT	PAPER NUMBER
PISCATAWAY, NJ 08855			1744	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/768,363

Applicant(s)

JIMENEZ ET AL.

Examiner

Laura C. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24,27,30 and 33-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-24,27,30 and 33-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1014, 0328, 0525.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. The examiner confirms the provisional election made by the Applicant on 29 March 2005 drawn to the species presented in Figures 6-12. This confirmation was made in a telephone conversation with Applicant's representative, Harris A. Wolin on 07 June 2005.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP j 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The French Patent 38440 on Page 2 Line 20 was not included in any of the Information Disclosure Statements and a copy of this document is not available to the Examiner.

3. The first listed reference in the Information Disclosure Statement of 25 May 2005 is a duplicate reference made to reference "AA" of the Information Disclosure Statement of 14 October 2004.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the

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description: "1325" (Figure 13); "1422", "1425", "1418", "1424", "1414", "1420", "1417", and "1415" (Figure 14); "1515", "1518", "1525", "1522", "1525", "1514", "1520", and "1517" (Figure 15); "2614", "2620" (Figure 26); "2714", "2718" (Figure 27); "2814" (Figure 28); "2910A", "2916", "2930", "2914" (Figure 29); "3848" (Figure 38); "a" (Figure 40). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the combination of a power toothbrush having a power source, motor, a mechanical vibratory device and a first non-movable cleaning/treating element adjacent the first end, a second non-movable cleaning/treating element adjacent the free end, and a plurality of cleaning/treating elements disposed between the non-movable cleaning/treating elements (Claim 37) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 35-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

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which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 37 is drawn to a powered toothbrush having “a mechanical vibratory device which causes the cleaning head to *vibrate*, wherein said cleaning head includes a first *non-movable* cleaning/treating element...a second *non-movable* cleaning/treating elements...and wherein said at least one of said plurality of cleaning/treating elements is *movable independent* of any other cleaning/treating element(s).” It is unclear as to how the cleaning head is vibrating and elements disposed on the vibrating head are “non-movable” or “movable independent” of other elements.

Claims 35-36 are rejected for the same reasons as Claim 37, in that Claim 35 requires “at least one non-movable cleaning/treating element” that is located on a vibrating cleaning head and Claim 36 requires “at least one cleaning/treating element is movable independent of any other cleaning/treating element”.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims 19-20 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Cacka et al., US 2002/0120991.

Cacka et al. disclose the claimed invention including a handle (4), a cleaning head attached to the handle (14), a power source (10), a motor (24), and a mechanical vibratory device (such as an off center weight; Paragraph 60 or Abstract) which causes the cleaning head to vibrate (Abstract), the cleaning head has a plurality of cleaning/treating elements extending from the cleaning head (16), wherein at least some of the cleaning elements have characteristics which differ from other cleaning elements, such as bristle length (see Figures, bristles "16" vary in length). The cleaning elements (16) are bristles (paragraph 42; see Figures). The cleaning head has a free end (top end portion of cleaning head "14", as shown in Figure 2) and includes a tuft that follows *at least a portion of* a contour of the free end (see Figure 2, the top most tuft that is partially covered follows a small portion of the contour of the free end). At least one of the cleaning elements extends further from the cleaning head than at least one other of the cleaning elements (see varying lengths of bristles in Figure 1, some extend further from the cleaning head surface than others).

8. Claims 19-20, 23-24, 27, 33, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Chan et al., US 2004/0200016.

Chan et al. disclose the claimed invention including a handle (12), a cleaning head attached to the handle (30), a power source (voltage source, paragraph 31), a motor (24), and a mechanical vibratory device (such as a shaft that can oscillate or reciprocate the bristle carrier(s), paragraph 31) which causes the cleaning head to

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vibrate (see motion arrows in Figures, paragraph 32; also it is noted that “vibrate” is defined as “to move back and forth or to and fro, especially rhythmically and rapidly” according to *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company*), the cleaning head has a plurality of cleaning/treating elements extending from the cleaning head (62, 64, or 162), wherein at least some of the cleaning elements have characteristics which differ from other cleaning elements, such as bristle length or material (see Figures 3-7D). The cleaning elements are a combination of bristle elements (62, 64) and elastomeric elements (162). At least one of the cleaning elements extends further from the cleaning head than at least one of the other cleaning elements (see Figure 5). The cleaning elements include bristle walls (see portions “62” as shown in Figure 3, see also paragraph 34). Some of the cleaning elements extend from a support structure (either “60” or “70” having at least a portion that is movable relative to the cleaning head (see motion arrows shown in the Figures) so that at least one of the cleaning elements is movable independent any other cleaning element (cleaning elements found on support structure “60” move independently from any cleaning element found on support structure “70” and vice versa, see Figures).

9. Claims 19-21, 23, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Hafliger et al., USPN 6,802,097.

Hafliger et al. disclose the claimed invention including a handle (1), a cleaning head attached to the handle (3), a power source (25), a motor (15), and a mechanical vibratory device (10; Column 3 Lines 40-49) which causes the cleaning head to vibrate

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(Column 2 Lines 40-44), the cleaning head has a plurality of cleaning/treating elements extending from the cleaning head (6), wherein at least some of the cleaning elements have characteristics which differ from other cleaning elements, such as bristle length or angle (see Figures 1 and 3). The cleaning elements (6) are comprised of bristles (6 or 6a; Column 4 Line 39) or of non-bristle or elastomeric elements (6d; Column 4 Lines 46-50). There are bristles disposed at a non-perpendicular angle to the cleaning head (see right-most portion of bristles in Figure 1 that is nearest reference numeral "3", the right-most portion of bristles in Figure 1 appear to be at nearly an 80 degree angle to the cleaning head). At least one of the cleaning elements extends further from the cleaning head than at least one of the other cleaning elements (see Figure 1).

10. Claims 19-20 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Giuliani et al., USPN 5,305,492.

Giuliani et al. disclose the claimed invention including a handle (12), a cleaning head attached to the handle (14), a power source (electromagnets, Column 3 Lines 16-21), a motor (36), and a mechanical vibratory device (lever arm; Column 3 Lines 13-15) which causes the cleaning head to vibrate (Column 3 Lines 13-15), the cleaning head has a plurality of cleaning/treating elements extending from the cleaning head (generally at 17), wherein at least some of the cleaning elements have characteristics which differ from other cleaning elements, such as bristle length (see Figure 2). The cleaning elements (17) are comprised of bristle elements (see Figures). At least one of the cleaning elements extends further from the cleaning head than at least one of the other cleaning elements (see Figure 2; Column 2 Lines 52-61).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hafliger et al., USPN 6,802,097 in view of Davies, US 2004/0134007.

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Hafliger et al. disclose all elements above, however do not include cleaning/treating elements on an opposite side of the head than other cleaning elements.

Davies discloses a toothbrush having a cleaning head carrying bristles (3) on one face (4) and an opposite head face (5) including cleaning elements that act as tongue cleaning structure (6; Paragraph 16).

It would have been obvious for one of ordinary skill in the art to modify the side of the cleaning head opposite of the cleaning elements of Hafliger et al. to further include additional cleaning elements, as Davies teaches, so that one may use the opposite side to clean the tongue in order to remove bacteria.

12. Claims 19, 20, 22, 24, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kott, USPN 3,196,299 in view of Hohlbein, US 2004/0255416.

Kott discloses a power toothbrush comprising a handle (24), a cleaning head attached to the handle (21), a power source (55, 56), a motor (27), and a mechanical vibratory device (28, an eccentric weight; Column 2 Lines 65-69), the cleaning head (21) having a plurality of cleaning/treating elements (unlabeled, shown in Figure 1). Kott does not disclose that the plurality cleaning/treating elements have characteristics that differ from other cleaning/treating elements. However, Kott teaches a powered device that accepts the heads of conventional toothbrushes so that there is a greater variety of toothbrushes available to a user so that the user has the most desirable bristle hardness, brush contour, etc. and an interchangeable head so that more than one user can use the powered portion of the device (Column 1 Lines 22-36).

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Hohlbein discloses a cleaning head (140) having a plurality of cleaning/treating elements extending from the cleaning head (generally at "130", see Figure 3, paragraph 34), wherein at least some of the cleaning elements have characteristics which differ from other cleaning elements, such as by shape or material (see Figure 3; paragraph 34). Cleaning elements are comprised of bristle elements, non-bristle elements, and combinations of both (see Figure 3; paragraph 34 and paragraph 42). The cleaning head has a free end (right most end as shown in Figure 3) and one of the cleaning elements includes a tuft that follows at least a portion of a contour of the free end (134b; see Figures 2-3). The cleaning elements include bristle walls (see Figures 1 and 3). Some cleaning elements are bristles on one side of the head (130) and there are other cleaning elements on an opposite side of the head that comprise tongue cleaning structure (140; paragraph 35).

It would have been obvious for one of ordinary skill in the art to provide the toothbrush device of Kott with a manual toothbrush that acts as a head having bristle tufts of varying shapes and tongue cleaning structure, as Hohlbein teaches, in order to provide a cleaning element arrangement that more beneficially cleans the contours of teeth and to provide cleaning elements for cleaning bacteria from a tongue.

13. Claims 19-20, 23, 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kott, USPN 3,196,299 in view of Halm, USPN 5,813,079.

Kott discloses all elements above, however does not include a support structure having a portion that is movable relative to the cleaning head or cleaning elements having characteristics that differ from other cleaning elements.

Halm discloses a cleaning head (22) that includes a first non-movable cleaning/treating element adjacent a first end (first end being tuft nearest reference numeral "21" as shown in Figure 2A), a second non-movable cleaning element adjacent a free end (free end being left most portion of head as shown in Figure 2A, with the first non-movable cleaning/treating element being the tuft left to the one in Figure 2A that has reference numeral "27"), and a plurality of cleaning elements disposed between the non-movable cleaning elements (24), wherein at least one of the plurality of cleaning elements extends from a support structure (23) having a portion that is movable relative to the cleaning head (bristles "24" found on head "23" are movable relative to the head (see Figure 2E), wherein at least one of the plurality of elements is movable independent of any other cleaning element (the plurality of bristles "24" of head "23" are capable of being moved independent of bristles "27", see Figure 2E). The support structure (23) enables rotation of the cleaning elements relative to the head (see Figure 2E). The first and second non-movable cleaning elements (both are "27") are bristle tufts (see Figures; Column 5 Lines 19-22). The plurality of cleaning elements disposed between the first and second non-movable cleaning elements (24) include bristle tufts (see Figures; Column 5 Lines 19-22). Additionally, at least one of the cleaning elements extends further from the cleaning head than at least one other of the cleaning elements (bristles of groups "24" and "27" have different lengths; Column 5 Lines 19-22; see Figure 2D).

It would have been obvious for one of ordinary skill in the art to provide the toothbrush device of Kott with a manual toothbrush that acts as a head having bristle

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tufts of varying lengths and a movable support structure, as Halm teaches, in order to provide a cleaning element arrangement that acts more resiliently to teeth contours which are to be cleaned and in order to have longer bristles that extend further between teeth when shorter bristles are cleaning the tops of teeth.

14. Claims 22, 24, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kott, USPN 3,196,299 and Halm, USPN 5,813,079, in further view of Moskovich, USPN 5,602,082.

Kott and Halm disclose all elements above however do not include a cleaning head that further includes at least two cleaning elements having different cross sections.

Moskovich discloses a toothbrush head having at least two cleaning elements with different cross sections (86, 88, 90, 92), including elements that are bristle walls (88, 90), and additionally includes tufts that follow at least a portion of a contour of the free end of the cleaning head (86) to form a cup about the tooth to clean it efficiently (Column 6 Lines 19-24), and wherein at least one cleaning element extends further from the cleaning head than at least one of the other cleaning elements (see Figure 16).

It would have been obvious for one of ordinary skill in the art to modify the cleaning elements of Kott and Halm to include cleaning elements having different cross sections including one that follows at least a portion of a contour of the cleaning head, as Moskovich teaches, in order to effectively clean many sides of a tooth at once.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Cole whose telephone number is (571) 272-

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1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LCC

07 June 2005



MARK SPISICH
PRIMARY EXAMINER
GROUP 3400

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